

SEAL ASSEMBLY AND ROTARY MACHINE CONTAINING SUCH SEAL

ABSTRACT OF THE DISCLOSURE

A seal assembly which, among other applications, may be used for sealing fluid leakage between a steam or combustion (gas) turbine rotor and a turbine stator body. The seal assembly includes elements having a plurality of spaced leaf seal members with slots therebetween. Each leaf seal member is angled out-of-plane between a fixed end and a free end thereof, and the free ends slidably engage the rotatable component. In one embodiment, the fixed ends of each leaf seal member are positioned substantially perpendicular to a longitudinal axis of the rotating component. A support may be provided supporting the free end such that it contacts a distal end of the support in an operative state and is out of contact with the distal end in an inoperative state. Seal members may include two different materials having different coefficients of thermal expansion.